

tagged goshawks reveal about habitat suitability for this species?"

LOCATION OF GOSHAWK NEST SITES IN RELATION TO RIPARIAN AREAS IN THE CENTENNIAL MOUNTAINS, NORTHEASTERN IDAHO

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Many studies have reported that northern goshawks (*Accipiter gentilis*) often build nests near permanent water sources. Fifteen active nest sites found between 1989 and 1992 on the south side of the Centennial Mountains (Targhee National Forest, Idaho) were located an average distance of 238 ± 180 (SD) m from streams ($N = 11$), springs ($N = 3$), or ponds ($N = 1$). In order to determine if goshawks disproportionately select nest sites in or adjacent to riparian habitats we used taped broadcast calls to systematically survey a 75 km² contiguous area of relatively undisturbed habitat. Within the survey area, two active and five alternate nests were found. Average distance to water of these nests, 152 ± 82 (SD) m, did not differ significantly from historic sites. An analysis of available versus used habitats within the study area will be presented. Nest-site characteristics and the density of nests found using systematic survey methods will be compared to nests found on the forest over the past 5 yr using non-random search methods.

THE BREEDING PERFORMANCE OF AN INTRODUCED POPULATION OF NORTHERN GOSHAWKS IN BRITAIN: IMPLICATIONS FOR FOREST MANAGEMENT

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Northern goshawks (*Accipiter gentilis*) were introduced into coniferous forests in the English/Scottish borders in the late 1960s to early 1970s. The first breeding attempts were confirmed in 1972, but it was not until 1977 that successful breeding was recorded. Since then the population has increased annually to at least 61 occupied home ranges in 1993. We report on breeding performance and range expansion, and explore which factors are limiting the growth of this isolated population. Goshawks are still rare in the UK where they have established numerous widely scattered populations resulting from introductions by falconers. Goshawks also have a high level of legal protection which required the development of a management strategy to minimize the impact of forestry operations during the breeding season. The rationale behind this strategy is described together with problems associated with an increasing population in managed woodlands.

NEST-SITE AND MATE FIDELITY OF NORTHERN GOSHAWKS IN THE INDEPENDENCE AND BULL RUN MOUNTAINS OF NORTHEASTERN NEVADA

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In 1991, a study was begun to examine possible impacts of gold mining activity on a population of northern goshawks (*Accipiter gentilis*) breeding in the Independence and Bull Run Mountains of northeastern Nevada, Elko County. Aerial surveys by helicopter conducted in early April of 1991, 1992 and 1994 located 10, six and 26 occupied goshawk nests in the study area, respectively. Occupancy was ground-truthed in early to mid-May. An additional 14, 22 and five nests were found on foot in 1991, 1992 and 1994, respectively. In 1992, breeding pairs and offspring were banded with USFWS bands and color-anodized alpha-numeric bands, beginning long-term monitoring of nest stand fidelity, turnover rates and lifetime reproduction of goshawks in the study area. Adults were trapped using a live great horned owl (*Bubo virginianus*) and dho-ghaza net. In one case a female was trapped using a plastic decoy owl. By the end of the 1994 season 194 adult and immature goshawks had been colormarked for future identification. In 1993, 11 of 15 mated pairs banded in 1992 returned to the same nest stand, three nest stands were unoccupied and one female returned to the same nest with a new mate. Of seven nests where the female only was banded in 1992, six returned to the same nest stand. In 1994, only four previously banded pairs returned to the same nest stand and four males returned to the same nest stand with new mates. There were five cases of nest switching. Two females moved <1.6 km to alternate nests within the nesting territory, two females moved 4.8 and 9.6 km, and one male moved 9.6 km. Despite the apparent stability of the population in the study area, trends may indicate a state of flux. Further data on the movements of color-marked birds in this population will be necessary before any conclusions concerning the long-term stability of this population can be made.

NESTING HABITAT PREFERENCE AND AVAILABILITY OF SUITABLE NESTING HABITAT OF COEXISTING ACCIPITER IN THE JEMEZ MOUNTAINS OF NORTHCENTRAL NEW MEXICO

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Three species of accipiter (northern goshawk, *Accipiter gentilis*, $N = 42$; Cooper's hawk, *A. cooperii*, $N = 52$; sharpshinned hawk, *A. striatus*, $N = 16$) nest sympatrically in